### **United States Department of Agriculture**

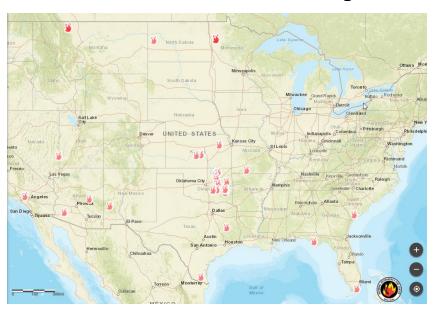
# **Water and Climate Update**

April 08, 2021

The Natural Resources Conservation Service produces this weekly report using data and products from the <u>National Water and Climate Center</u> and other agencies. The report focuses on seasonal snowpack, precipitation, temperature, and drought conditions in the U.S.

Snow2	Drought10
Precipitation4	Other Climatic and Water Supply Indicators13
Temperature8	More Information

## The 2021 wildfire season has begun



Widespread dry conditions in the West have the potential for a severe 2021 wildfire season. Today's National Interagency Fire Center summary of conditions is "Ten new large fires were reported yesterday, seven in Arkansas, and one in Florida, Kanas, and South Carolina. Eight large fires were contained." Wildland firefighters continue to work toward containment of 27 large fires across the country. Since the start of the year, 78,555 acres have burned across the U.S. Currently, more than half of the large wildfires are in Oklahoma. Last week, both North Dakota and Wisconsin declared states of emergency due to wildfires and wildfire risk. Drought conditions shown on the Drought Monitor map has officials preparing for a potentially busy fire season this year.

#### Related:

North Dakota declares wildfire emergency after small town evacuated – MSN Western North Dakota continues to battle fires – KFGO (ND)

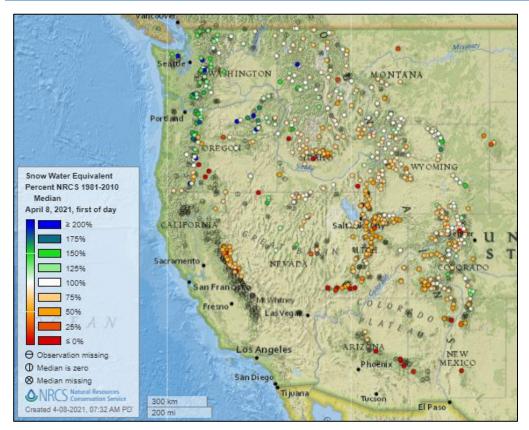
Gov. Tony Evers declares state of emergency as risk of wildfire remains high in Wisconsin – Madison.com (WI)

<u>'Choke Cherry Fire' at 700 acres in Iron County and still active</u> – MSN (UT)

Gila Fire burning 2 hours southwest of Phoenix up to 2,100 acres, 25% containment – AZFamily (AZ) Dry, Warm Conditions Setting Scene For Busy Early Wildfire Season – CBS Local on MSN.com (CA) 'Record-breaking' temperatures to engulf Southwest, with 'critical' fire weather conditions possible Washington Post

<u>Severe weather moving through Central and South US, wildfire danger Southwest</u> – ABCNews Why an intense fire season may be shaping up in 2021 - MSN

### **Snow**



Snow water equivalent percent of median map

## See also:

Snow water equivalent values (inches) map



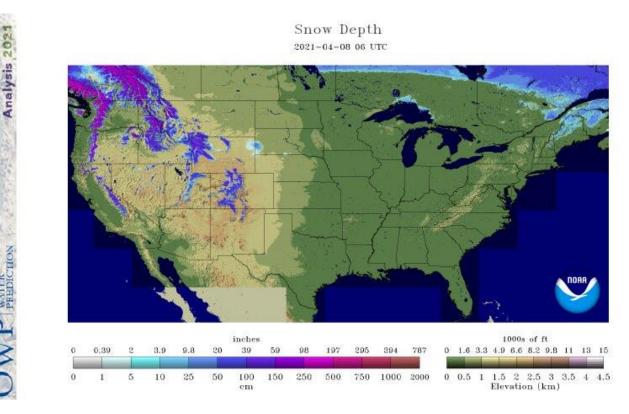
Alaska snow water equivalent percent of median map

#### See also:

Alaska snow water equivalent values (inches) map

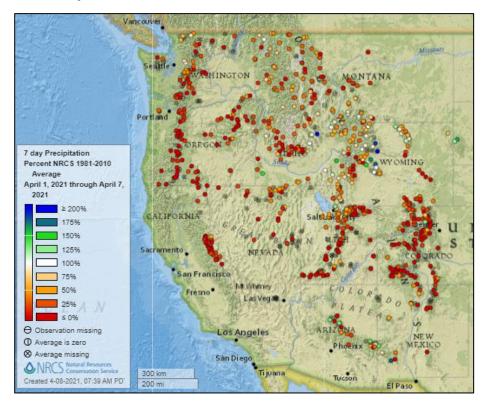
### **<u>Current Snow Depth</u>**, National Weather Service Snow Analysis

Source: NOAA Office of Water Prediction



## **Precipitation**

### Last 7 Days, NRCS SNOTEL Network



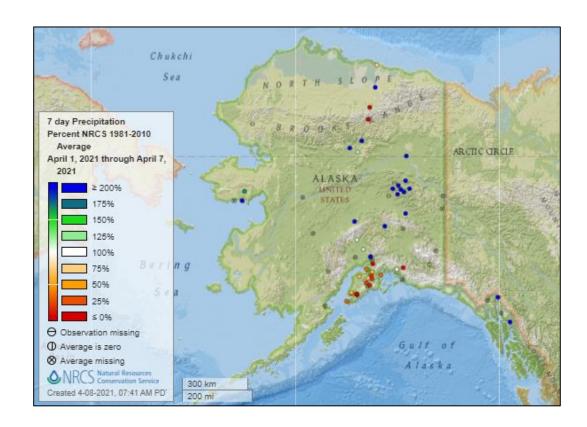
7-day precipitation percent of average map

#### See also:

7-day total precipitation values (inches) map

Alaska 7-day precipitation percent of average map

### See also: Alaska 7-day total precipitation values (inches) map

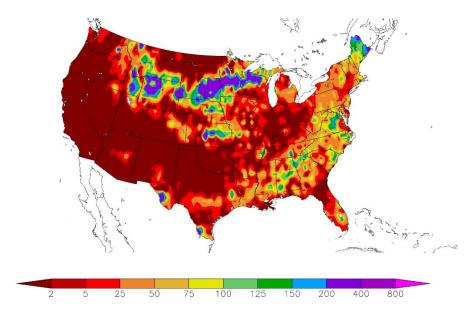


### Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

7-day precipitation percent of normal map for the continental U.S.

See also: 7-day total precipitation values (inches) map Percent of Normal Precipitation (%) 4/1/2021 - 4/7/2021



Generated 4/8/2021 at HPRCC using provisional data.

NOAA Regional Climate Centers

### Last 7 Days, National Weather Service (NWS) Networks

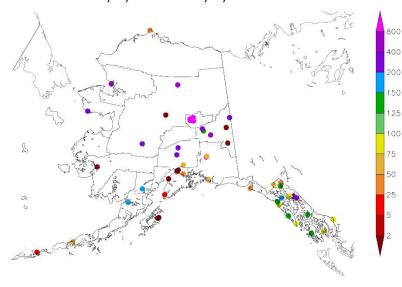
Source: Regional Climate Centers

7-day precipitation anomaly map for Alaska.

#### See also:

7-day total precipitation values (inches) map

Percent of Normal Precipitation (%) 4/1/2021 - 4/7/2021

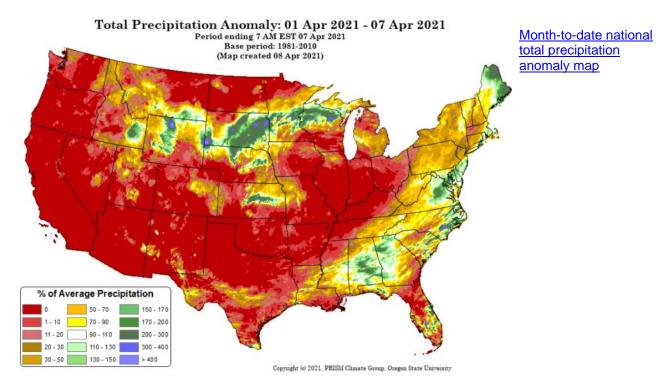


Generated 4/8/2021 at HPRCC using provisional data.

NOAA Regional Climate Centers

### Month-to-Date, All Available Data Including SNOTEL and NWS Networks

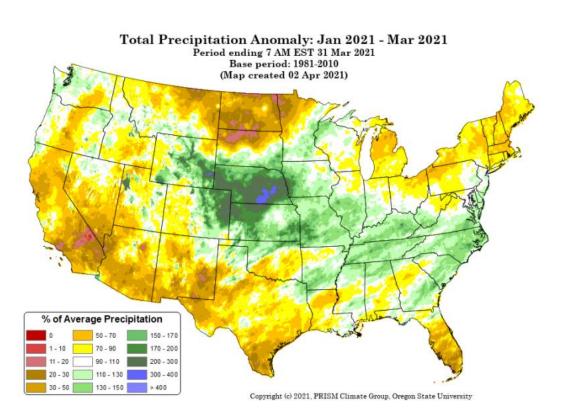
Source: PRISM



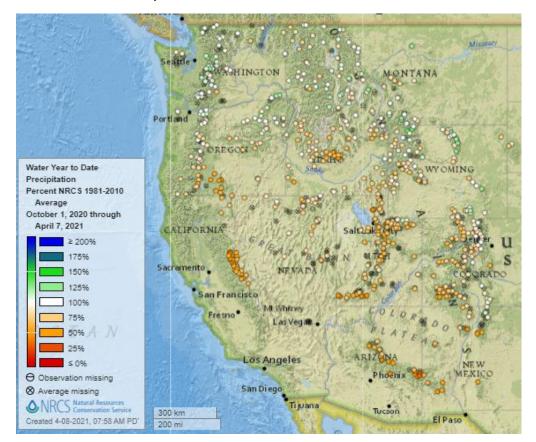
### Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

January through March 2021 precipitation anomaly map



### Water Year-to-Date, NRCS SNOTEL Network



2021 water year-to-date precipitation percent of average map

See also: 2021 water year-todate precipitation values (inches) map



Alaska 2021 water yearto-date precipitation percent of average map

See also: Alaska 2021 water year-todate precipitation values (inches) map

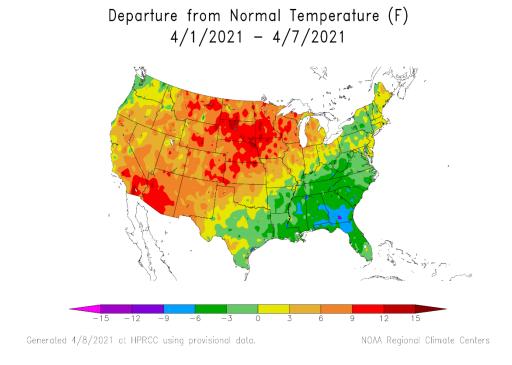
## **Temperature**

### Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

7-day temperature anomaly map for the contiguous U.S.

See also: 7-day temperature (° F) map



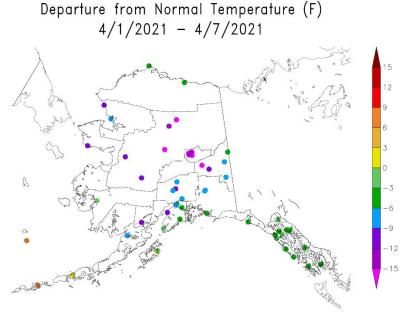
## Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

7-day temperature anomaly map for Alaska.

#### See also:

7-day temperature (° F) map



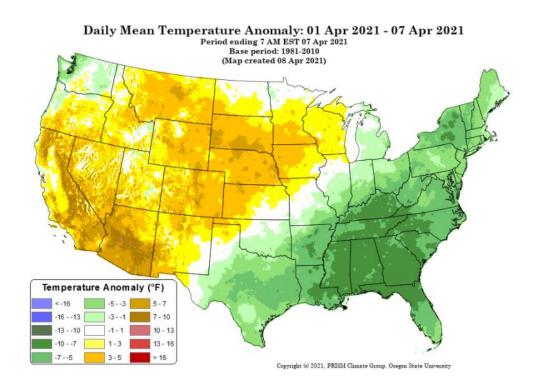
Generated 4/8/2021 at HPRCC using provisional data.

NOAA Regional Climate Centers

### Month-to-Date, All Available Data Including SNOTEL and NWS Networks

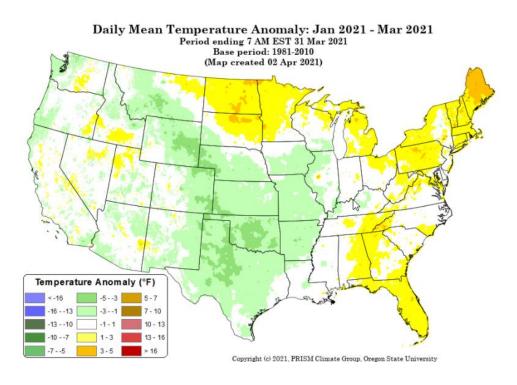
Source: PRISM

Month-to-date national daily mean temperature anomaly map



### Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM



January through March 2021 daily mean temperature anomaly map

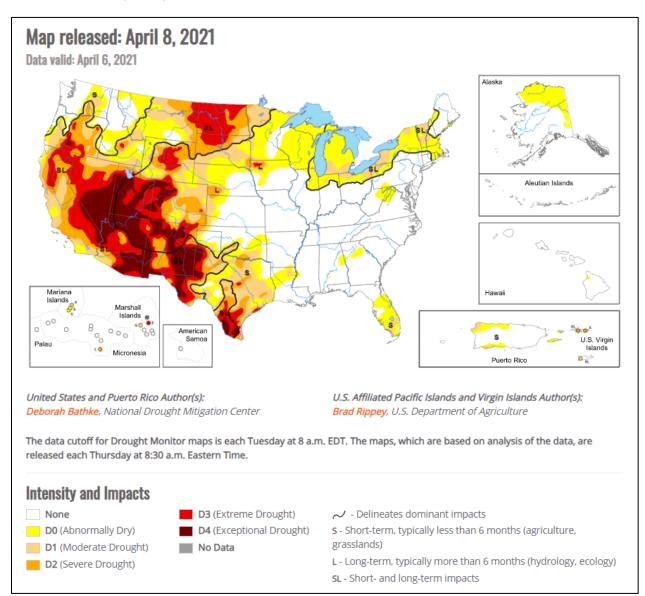
## **Drought**

#### **U.S. Drought Monitor**

Source: National Drought Mitigation Center

### **U.S. Drought Portal**

Source: NOAA



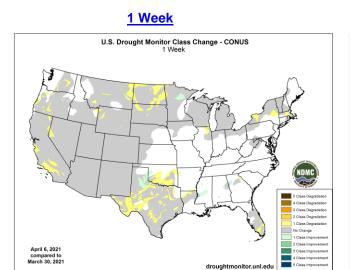
### Current National Drought Summary, April 08, 2021

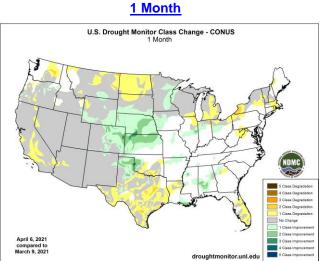
Source: National Drought Mitigation Center

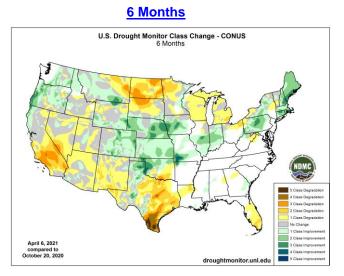
"A cold front moving across the eastern half of the country last week brought showers and thunderstorms and left record-breaking cold temperatures in its wake. Meanwhile, dry conditions and warmer than normal temperatures continued in the West with many locations setting daily record high temperatures. The overall effect was a general deterioration of conditions across the Lower 48 as moisture deficits continued to build in the West and in locations in the eastern half of the country that missed out on the heaviest rainfall. Improvements were minimal and limited to parts of the Midwest and Southern Plains."

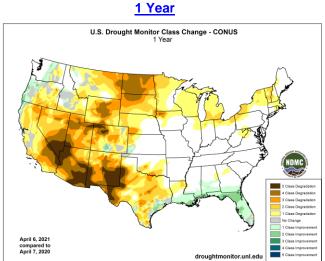
### **Changes in Drought Monitor Categories over Time**

Source: National Drought Mitigation Center









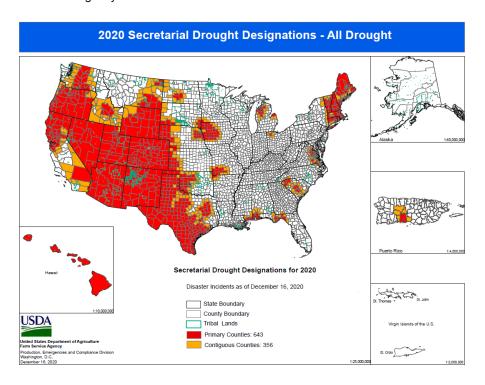
Changes in drought conditions over the last 12 months for the contiguous U.S.

## **Highlighted Drought Resources**

- <u>Drought Impact Reporter</u>
- Quarterly Regional Climate Impacts and Outlook
- U.S. Drought Portal Indicators and Monitoring
- U.S. Population in Drought, Weekly Comparison
- USDA Disaster and Drought Information

### **Secretarial Drought Designations**

Source: USDA Farm Service Agency



### Wildfires: USDA Forest Service Active Fire Mapping



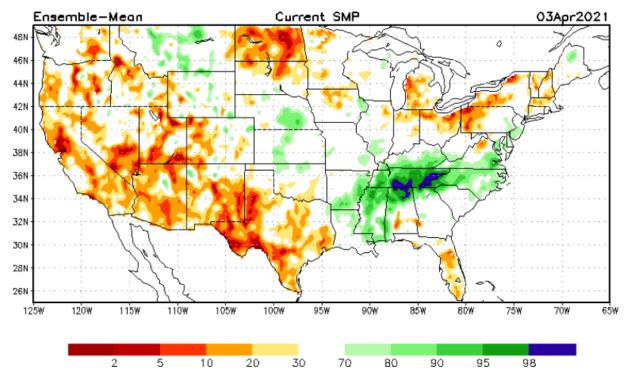
### Highlighted Wildfire Resources

- <u>National</u>
   <u>Interagency Fire</u>
   Center
- InciWeb Incident Information System
- Significant Wildland Fire Potential Outlook

## **Other Climatic and Water Supply Indicators**

### **Soil Moisture**

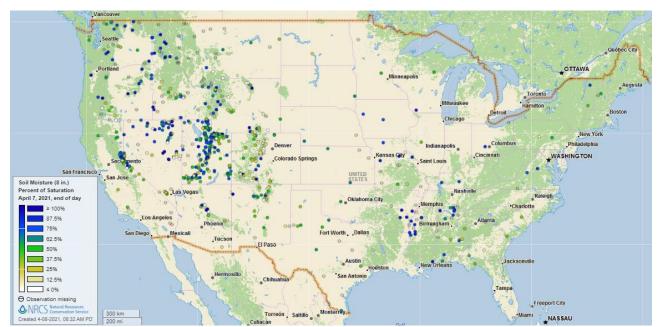
Source: NOAA National Centers for Environmental Prediction



Modeled soil moisture percentiles as of April 3, 2021

### **Soil Moisture Percent of Saturation**

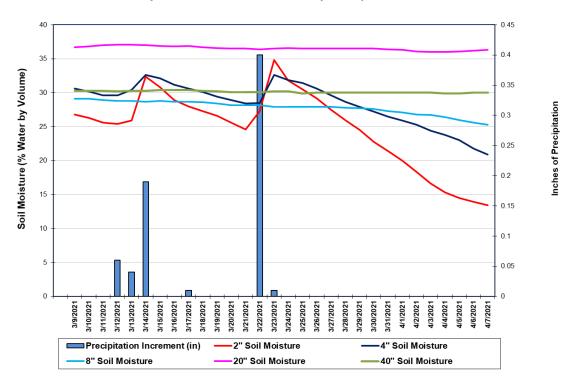
Source: NRCS SNOTEL and Soil Climate Analysis Network (SCAN)



#### **Soil Moisture**

Source: NRCS Soil Climate Analysis Network (SCAN)

Fort Reno #1, Oklahoma (SCAN site 2022)
Daily Mean Soil Moisture vs. Daily Precipitation



This chart shows the precipitation and soil moisture for the last 30 days at the <u>Fort Reno #1</u> SCAN site in Oklahoma. Precipitation totaling 0.41 inches fell on March 22-23, and increased the soil moisture at the -2, and -4, inch sensor depths. The -8, -20, and -40-inch depth sensors showed little change from the precipitation. Accumulated precipitation for the 30-day period was 0.71 inches.

#### **Soil Moisture Data Portals**

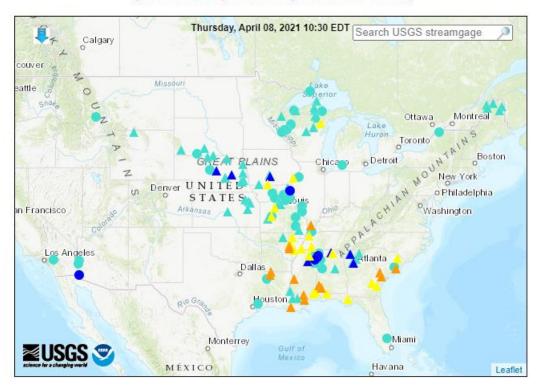
- USCRN Soil Moisture
- National Soil Moisture Network
- NOAA Climate Prediction Center Soil Moisture
- NASA Grace

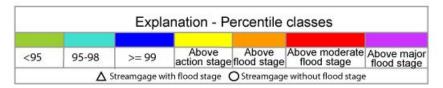
### Streamflow, Drought, Flood, and Runoff

Source: U.S. Geological Survey

## Map of flood and high flow conditions

(15 in floods [minor: 15], 20 in near-flood)





WaterWatch: Streamflow, drought, flood, and runoff conditions

### **Reservoir Storage**

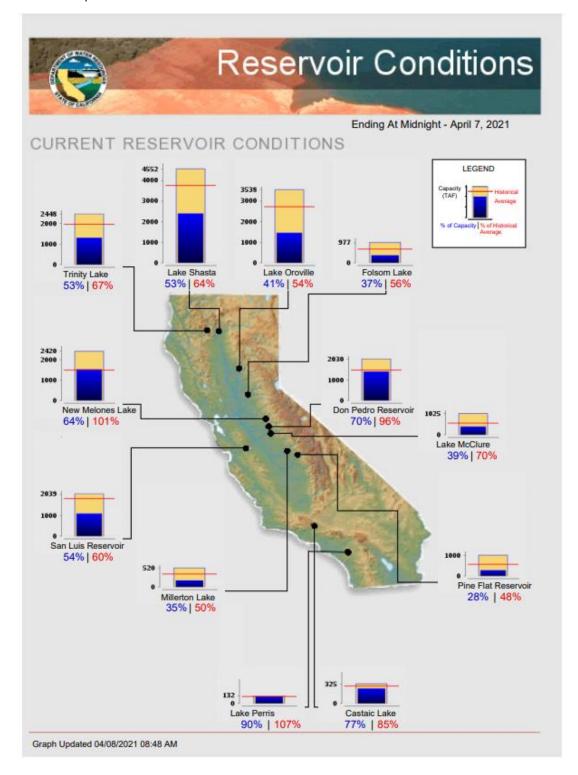
#### **Hydromet Teacup Reservoir Depictions**

Source: U.S. Bureau of Reclamation

- Upper Colorado
- Pacific Northwest/Snake/Columbia
- Sevier River Water, Utah
- Upper Missouri, Kansas, Oklahoma, Texas

#### **Current California Reservoir Conditions**

Source: California Department of Water Resources



**Current California Reservoir Conditions** 

### **Agricultural Weather Highlights**

Author: Brad Rippey, Agricultural Meteorologist, USDA/OCE/WAOB

National Outlook, Thursday, April 08, 2021: "A storm system currently centered over the western Corn Belt will drift northward and weaken across the upper Great Lakes region. A second storm will develop late in the week over the mid-South, also meandering northward. The latter system will cross the Great Lakes States by Sunday. Combined, the two storms could result in as much as 1 to 2 inches of additional rainfall in the Midwest and 2 to 4 inches in parts of the South. Severe Southern thunderstorms will remain a threat through the weekend. In contrast, dry weather will prevail during the next 5 days from California to the southern High Plains. Early next week, a strong cold front will cross the northern Plains and upper Midwest; temperatures could fall below 20°F in parts of Montana and the Dakotas. The NWS 6- to 10-day outlook for April 13 – 17 calls for the likelihood of below-normal temperatures in most areas from the Rockies to the Appalachians, while warmer-than-normal weather will be confined to New England, the Far West, and the lower Southeast. Meanwhile, below-normal precipitation from the Pacific Coast to the Midwest should contrast with wetter-than-normal conditions across the Atlantic and Gulf Coast States, as well as southern sections of the Rockies and Plains."

### Weather Hazards Outlook: April 10 - 14, 2021

Source: NOAA Weather Prediction Center

### U.S. Day 3-7 Hazards Outlook

#### **About the Hazards Outlook**

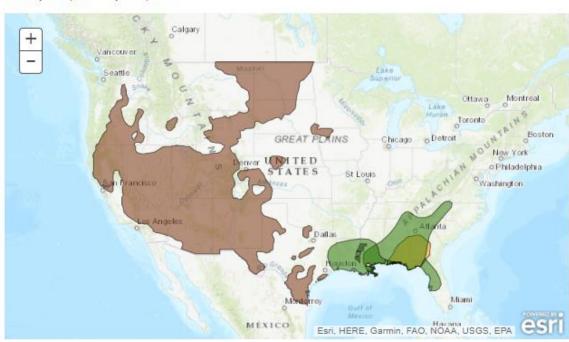
Created April 07, 2021

NOTE: These products are only created Monday through Friday. Please exercise caution using this outlook during the weekend.

Precipitation	<b>~</b>
Temperature	<b>N</b>
Soils	

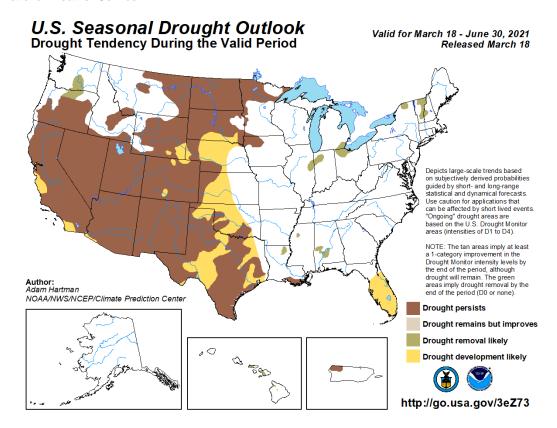


Valid April 10, 2021 - April 14, 2021



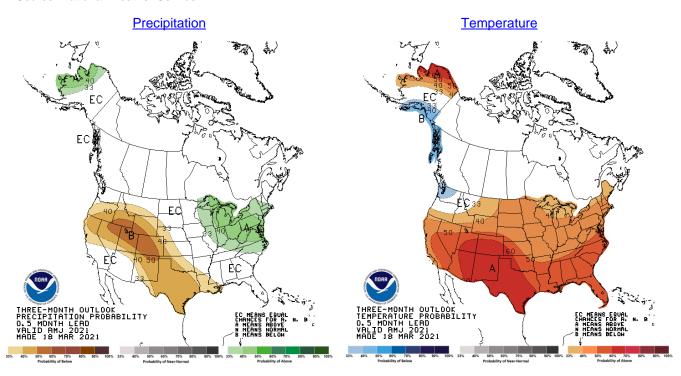
Seasonal Drought Outlook: March 18 - June 30, 2021

Source: National Weather Service



### **Climate Prediction Center 3-Month Outlook**

Source: National Weather Service



April-May-June (AMJ) 2021 precipitation and temperature outlook summaries

### **Water and Climate Update**

## **More Information**

The NRCS <u>National Water and Climate Center</u> publishes this weekly report. We welcome your feedback. If you have questions or comments, please <u>contact us</u>.